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ABSTRACT

This digest describes the key elements of Crime Prevention Through Environmental Design (CPTED). CPTED is based on the recognition that the physical environment influences human behavior. It is different from conventional security measures, which many times are based on prohibitions, in that it focuses on desired behaviors and attempts to solve problems by changing the physical and social environment and by reinforcing positive behavior. The core elements of CPTED include natural surveillance, in which the whole environment can be viewed; natural access control to determine who can and cannot enter a facility; and territoriality, in which an established control is exerted over the environment. A CPTED analysis of a school evaluates crime rates, office-referral data, school cohesiveness and stability, as well as shortcomings in school design. Naturally, it is more efficient to integrate CPTED during an expansion or new construction, so it is important to integrate CPTED into school planning. When considering a CPTED analysis, school officials should look to professionals for an assessment. These assessments include crime mapping; reports from local police and medical centers; surveys of parents, teachers, and students; inspection of the campus and its surroundings, and an analysis of the surrounding neighborhood. (RJM)

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Safer Schools Through Environmental Design

By Tod Schneider

In recent years, growing awareness about how the physical environment affects human behavior has been integrated into a knowledge-base known as Crime Prevention Through Environmental Design (CPTED).

Although CPTED's crime-prevention principles have been applied successfully throughout the world in various community settings, most educational facilities were not designed with this knowledge in mind. Now that safety has become a high priority in our nation's schools, CPTED offers school planners, board members, and administrators principles that can guide them in creating a safe school environment.

By conducting a CPTED analysis, school officials can pinpoint specific environmental changes that will foster desired behavior rather than inadvertently encouraging unwanted behavior. This Digest describes CPTED's key elements and describes how to conduct an analysis.

What Sets CPTED Apart from Conventional Security Measures?

Conventional security measures emphasize behavior that is prohibited, and such measures are largely fear-based. For example, a school that settles for implementing only conventional security measures such as security guards and metal detectors may succeed at becoming more secure, but it might fail to address the underlying problem (such as bullying) and simultaneously reinforce fear or adversely affect the school atmosphere.

In contrast, CPTED focuses on behavior that is desired. A comprehensive CPTED analysis attempts to identify central problems and craft changes in the physical and social environment that will reinforce positive behavior. Posted rules and theme-oriented artwork to reinforce prosocial curriculum, greater use of windows to enhance visibility and reduce isolation, student art displays to build a sense of pride, altered seating arrangements to encourage supportive group interactions, or changes in scheduling the use of space to avoid conflict are all potential CPTED measures that could be implemented.

What Are the Key Elements of CPTED?

Core elements of CPTED include the following:

1. *Natural surveillance*—Keeping an eye on the whole environment without taking extraordinary measures to do so. Typical obstacles to natural surveillance include solid walls and lack of windows that provide visibility to areas of the school building that have experienced a high incidence of problem behaviors. Pruning shrubbery is one step that can be taken to improve natural surveillance of school grounds.

2. *Natural access control*—Determining who can or cannot enter a facility. Obstacles to access control include unsupervised, unlocked entrances to the buildng. Converting several secondary doors into locked, alarmed, emergency exits is one way to improve access control.

3. *Territoriality*—Establishing recognized authority and control over the environment, along with cultivating a sense of belonging. Poor border definition can impede territoriality. Jointly controlled park land adjacent to a school would be an example of poor border definition. School uniforms offer one approach to both establishing a sense of belonging and making it easy to distinguish between students and nonstudents.

How Do CPTED Concepts Apply to the School Setting?

CPTED concepts have been successfully applied in a wide variety of environments, including streets, parks, museums, government buildings, houses, and commercial complexes. The approach is particularly applicable to schools, where outdated facilities are common. Most schools in the United States were built thirty to sixty years ago, and many were constructed in the early 1900s. Security issues were almost nonexistent at the time, and technology was dramatically different. As a result, the buildings are generally dysfunctional in today's more security-conscious environment.

Although school shootings are rare occurrences, other forms of violent or antisocial behavior such as bullying, harassment, and vandalism are quite common. A CPTED analysis of a school evaluates crime rates, office-referral data, school cohesiveness and stability, as well as core design shortcomings of the physical environment, such as blind hallways, uncontrolled entries, or abandoned areas that attract problem behavior.

Each school, district, and community should institute measures appropriate for their own circumstances. A design for an inner-city, high-crime neighborhood is often inappropriate for a rural, low-crime neighborhood. There is not a single solution that will fit all schools, but there are many good models that schools can draw on.

When schools fail to integrate CPTED concepts into expansion or reconstruction plans, an important opportunity is lost. Rectifying this oversight after the fact can be expensive and politically uncomfortable. Applying CPTED concepts from the beginning usually has minimal impact

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on costs, and the result is a safer school that can focus on its mission of teaching and learning.

How Is CPTED Integrated into School Planning?

Particularly as schools deteriorate with age, major repairs or replacement become necessary. If CPTED analysis is applied at the same time that other construction work is planned, the cost is often negligible.

By far the most economical approach is to design new facilities with CPTED principles in mind. CPTED measures usually will not increase costs, and may in fact reduce them.

In some cases, such as following a serious threat or a school shootings, security issues become paramount. There may be strong support for conventional security measures, such as metal detectors or video cameras. If a more balanced, comprehensive approach is promoted, CPTED analysis will usually be more productive, especially in the long run.

In most school districts, building new facilities is not an option, so retrofitting of existing buildings must be done. The costs of modifying aspects of existing buildings can be minor or major, depending on the nature of the alteration.

How Is a CPTED Analysis Conducted?

For at least three reasons, it is preferable for CPTED analyses to be conducted by professionals who specialize in the field:

1. They are accustomed to looking for CPTED-related weaknesses and risk factors.

2. As outsiders, they can look at the school with fresh eyes, whereas school staff may be so accustomed to their environment that they no longer notice its idiosyncrasies or dysfunctional elements.

3. Unlike school staff, CPTED analysts clearly do not stand to personally benefit from the recommended improvements being implemented, and are not beholden to local politics or hidden agendas. As a result, their recommendations may appear more objective when presented to the public.

In cases where bringing in a consultant is not an option, inhouse staff can conduct their own analysis by studying misbehavior on campus and analyzing why it occurs. Whoever conducts the inspection should be armed with site maps and CPTED organizational guides.

A CPTED analysis may include crime mapping and statistical reports from local police, juvenile justice facilities, and medical centers to help identify patterns related to problem behavior, such as types of problems that are prevalent and time and location of occurrence. Students, staff, parents, and neighbors can be surveyed to obtain their perceptions of problem areas. If bullying were an identified problem, for example, responses might include (1) instituting a bullying-prevention curriculum to change the social ecology within the school, and (2) altering the environment to expose or eliminate isolated locations where incidents occur. This might involve removing thick brush, installing convex mirrors, or moving the staff lunch area to improve natural surveillance.

About one-third of school-related homicides occur inside the school, another third occur on school grounds, and the remainder occur off campus. As a result, all three elements of the environment bear examination.

An on-the-ground inspection should consider the school's surroundings and their inherent risks or benefits. In some communities the routes to and from school are extremely hazardous, exposing children to gang activity, traffic hazards, negative messages on billboards or advertisements, toxic chemicals, drug dealers, or bullies. Conversely, many neighborhoods offer resources and protective factors for students, including field-trip locations, mentors, evacuation sites, safe havens, and caring adults to whom students can turn for help.

Analysis of the surrounding neighborhood may lead to the establishment of Safe Route programs, with adults recruited to wear identifying vests and stand along the designated route during certain hours; campaigns to replace alcohol and cigarette billboards with more productive messages; or neighborhood cleanups, as just a few examples.

Analysis of the school setting itself should include an examination of the school property, from the borders inward. Hazards should be identified, including locations where students can be isolated and victimized. Inadequate or poorly thought out playground equipment may not be able to meet the level of demand during recess. This may contribute to conflict, or it could promote cooperation, depending on how effectively the site is staffed, how well supervisors are trained, and how uniformly students are instructed in desired behavior.

School grounds and parking lots are prime locations for school violence. "Dead" walls, solid walls that block vision, should be candidates for possible installation of windows or mirrors to establish natural surveillance and to eliminate hiding places for illicit activity.

The physical plant itself bears careful study. If the site has multiple buildings, access control is extremely challenging. Ideally, these buildings should be enclosed, forcing visitors to enter through controlled-entry points where access can be denied if necessary. The alternative is for each building to establish its own screening and control measures. Students, staff, and custodians are the local experts on vandalism and other problems within the school. They can help pinpoint locations requiring particular attention when remedies are being formulated.

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Contact Information:

Institute on Violence and Destructive Behavior, University of Oregon—http://darkwing.uoregon.edu/~ivdb/index.html (phone: 541-346-3591)

To find a CPTED inspector in your area, check with your local police department, or contact the International CPTED Association (ICA)—www.cpted.net.

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